REMARKS

In the Office Action mailed October 27, 2006, the Examiner noted that claims 1-12 were pending, and rejected claims 1-12. Claims 1, 6, 7 and 11 have been amended, no claims have been canceled, new claim 13 has been added, and, thus, in view of the forgoing claims 1-13 remain pending for reconsideration which is requested. No new matter has been added. The Examiner's rejections and are traversed below.

REJECTIONS under 35 U.S.C. § 112

Claims 6 and 7 stand rejected under 35 U.S.C. § 112, second paragraph as indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as his invention. Claims 6 and 7 have been amended to address the Examiner's rejections.

Withdrawal of the rejections is respectfully requested.

REJECTIONS under 35 U.S.C. § 103

Claims 1-12 stand rejected under 35 U.S.C. § 103(a) as obvious over Kita, U.S. Patent No. 5,870,590, in view of Applicant Admitted Prior Art (AAPA). Kita discusses a method of developing an Extended Finite State Machine (EFSM) for testing of software. In contrast, the present invention is to a system for testing Large Scale Integrated (LSI) circuits. Fig. 3 of the present Application is a graph representation of a functional block diagram of hardware (more specifically, DVD/HDD video recorder) in which a node and an edge represent a functional device and a signal line, respectively (see page 10, lines 15-21) while Fig. 5 of Kita is a state transition diagram of software in which a node and an edge represent a state and transition, respectively (see Kita col. 7, lines 16-20). As a result, Kita lacks the "constraint in the resource of a functional device corresponding to a certain node" described at page 16, lines 2-19 of the present Application. The Examiner asserts that Kita col. 8 lines 45 through col. 9 line 15 teaches the constraint (section 3 of the present Office Action), the cited portion of Kita only provides an overall description of the procedure shown in Fig, 3, and does not refer to any resource and/or the constraint of the resource at all. Thus, Kita cannot solve the problem that the conventional technology can disadvantageously generate a non-executable input/output sequence because it does not take into account the resource constraint (see page 2, lines 15-15 of the Application), and therefore does not generate any validation item function (which is a logical sum of various conditions expressed in logical expressions, see page 17, lines 19-24 of the Application) to extract therefrom a combination of variables (which corresponds to nodes and/or edges and make the validation item function as "1", see page 18, lines 11-15 of the Application)

Further, Kita states "Stage 1 (box 55). Create the specification source code, using the BNF and the Transformation Method Description for syntax and semantics. This specification source code is an ISL file compilable by a parser (see stage 2). It may be derived from a plain-English specification or may be coded as an initial matter in ISL." Column 8, lines 50-55. Kita therefore discusses a method of creating compilable code to test functionality and does not teach or suggest "inputting functional configuration information on the functional devices and connections among the functional devices," as in amended claim 1. The configuration information inputted as a block diagram ("functional configuration"). (See Page 60 lines 14-20 of the Application).

Further, Kita as cited or found does not teach or suggest "inputting a condition for the input/output sequence," as in amended claim 1. Kita at page 8, line 63 through page 9 line 5 states "[s]tage 4 (box 70). Traverse paths through the EFSM (or architecture) thus generating individual validation tests of the original specification. The EFSM may be comprehensively traversed in an "exhaustive testing" (allpaths) mode, or selected paths may be traversed in either a "thorough testing" or an "identification testing" (edge cover) mode, by using execution constraints. Validation tests are flagged. The output is a path file which is in the language upon which the specification was based (such as C)." Kita therefore suggests limiting which "paths" are traversed (i.e. which code is executed), not inputting a condition limiting input or output sequences.

Further, as Kita does not teach or suggest inputting functional configuration or conditions, it further does not teach or suggest "generating unit that generates a validation item function based on the functional configuration information and the condition," as in amended claim 1.

For the reasons stated above, Kita and AAPA taken separately or in combination fail to teach or suggest every element of claim 1 or the claims dependent therefrom. Withdrawal of the rejections is respectfully requested.

Claims 11 and 12 have similar limitations to those as argued above and are likewise distinguishable from the prior art. Withdrawal of the rejections is respectfully requested.

Kita does not teach the use of a "resources constraint condition," as in claim 3. Kita, column 9, line 2 states that the method uses "execution constraints" that limits which code is executed, not what output is allowed for a given functional block. Therefore, Kita and AAPA taken separately or in combination fail to teach or suggest every element of claim 3. Withdrawal of the rejections is respectfully requested.

NEW CLAIM

Claim 13 is new. Support for the claim found on page 3 lines 14-22 of the Application. The prior art failing to teach that the validation of an item is based on its functional configuration.

SUMMARY

It is submitted that the claims satisfy the requirements of 35 U.S.C. § 112. It is also submitted that claims 1-13 continue to be allowable. It is further submitted that the claims are not taught, disclosed or suggested by the prior art. The claims are therefore in a condition suitable for allowance. An early Notice of Allowance is requested.

If any further fees, other than and except for the issue fee, are necessary with respect to this paper, the U.S.P.T.O. is requested to obtain the same from deposit account number 19-3935.

Respectfully submitted,

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